

In the Claims:

Please amend the claims as shown:

1. (Previously Amended) A fusion transcript consisting of a homologue cross-over between two different genes with more than 80% sequence homology in certain regions, in particular regions of cross-over.
2. (Previously Amended) A fusion transcript according to claim 1, wherein the two genes are the genes of SCCA1 and SCCA2.
3. (Previously Amended) A full length fusion transcript protein between SCCA1 and SCCA2 having switched reactive site loops compared to basic promoter.
4. (Previously Amended) A substantially full length fusion transcript protein between SCCA1 and SCCA2 having switched reactive site loops compared to basic promoter.
5. (Original) A fusion protein according to claim 4 coded by one or more of exons 2 - 7 of SCCA1 gene fused to exon 8 of SCCA2 gene.
6. (Original) A fusion protein according to claim 1 coded by exon 2 - 7 of SCCA1 gene fused to exon 8 of SCCA2 gene.
7. (Original) A fusion protein according to claim 4 coded by one or more of exons 2 - 7 of SCCA2 gene fused to exon 8 of SCCA1 gene.
8. (Original) A fusion protein according to claim 1 coded by exon 2 - 7 of SCCA2 gene fused to exon 8 of SCCA1 gene.
9. (Currently Amended) A fusion protein according to claim 5, wherein the protein sequence is **(SEQ ID NO: 1)**
MNSLSEANTK FMFDLFQQFR KSKENNIFYS PISITSALGM VLLGAKDNTA
QQIKKVLHFD QVTENTTGKA ATYHVDRSGN VHHQFQKLLTE FNKSTDAYE
LKIANLKFGE KTYLFLQEYL DAIKKFYQTS VESVDFANAP EESRKKINSW VESQTNEKIK

NLIPEGNIGS NTTLVLVNAI YFKGQWEKKF NKEDTKEEF WPNKNTYKSI
QMMRQYTSFH FASLEDVQAK VLEIPYKGKD LSMIVLLPNE IDGLQKLEEK LTAEKLMEWT
SLQNMRETCV DLHLPRFKME ESYDLKDTLR TMGMVNIFNG DADLSGMTWS
HGLSVSKVLH KAFVEVTEEG VEAAAATAVV VVELSSPSTN EEFCCNHPFL FFIRQNKNTS
ILFYGRFSSP

10. (Original) A DNA sequence sequence coding for a fusion SCCA1/SCCA2 protein.

11. (Original) A DNA sequence comprising the nucleotide sequence of exon 2 – 7 of SCCA1 fused to the nucleotide sequence of exon 8 of SCCA2.

12. (Currently Amended) A DNA sequence according to claim 11, wherein the nucleotide sequence is (SEQ ID NO: 11)

ATGAATTCAC TCAGTGAAGC CAACACCAAG TTCATGTTGG ACCTGTTCCA
ACAGTTCAGA AAATCAAAAG AGAACAACAT CTTCTATTCC CCTATCAGCA
TCACATCAGC ATTAGGGATG GTCCTCTTAG GAGCCAAAGA CAACACTGCA
CAACAGATTA AGAAGGTTCT TCACTTTGAT CAAGTCACAG AGAACACCAC
AGGAAAAGCT GCAACATATC ATGTTGATAG GTCAGGAAAT GTTCATCACC
AGTTTCAAAA GCTTCTGACT GAATTCAACA AATCCACTGA TGCATATGAG
CTGAAGATCG CCAACAAGCT CTTCGGAGAA AAAACGTATC TATTTTTACA
GGAATATTTA GATGCCATCA AGAAATTTTA CCAGACCAGT GTGGAATCTG
TTGATTTTGC AAATGCTCCA GAAGAAAGTC GAAAGAAGAT TAACTCCTGG
GTGGAAAGTC AAACGAATGA AAAAATTAAA AACCTAATTC CTGAAGGTAA
TATTGGCAGC AATACCACAT TGGTTCTTGT GAACGCAATC TATTTCAAAG
GGCAGTGGGA GAAGAAATTT AATAAAGAAG ATACTAAAGA GGAAAAATTT TTT
TGGCCAAACA AGAATACATA CAAGTCCATA CAGATGATGA GGCAATACAC
ATCTTTTCAT TTTGCCTCGC TGGAGGATGT ACAGGCCAAG GTCCTGGAAA
TACCATACAA AGGCAAAGAT CTAAGCATGA TTGTGTTGCT GCCAAATGAA
ATCGATGGTC TCCAGAAG CT TGAAGAGAAA CTCACTGCTG AGAAATTGAT
GGAATGGACA AGTTTGCAGA ATATGAGAGA GACATGTGTC GATTTACACT
TACCTCGGTT CAAAATGGAA GAGAGCTATG ACCTCAAGGA CACGTTGAGA
ACCATGGGAA TGGTGAATAT CTTCAATGGG GATGCAGACC TCTCAGGCAT
GACCTGGAGC CACGGTCTCT CAGTATCTAA AGTCCTACAC AAGGCCTTTG

TGGAGGTCAC TGAGGAGGGA GTGGAAGCTG CAGCTGCCAC CGCTGTAGTA
GTAGTCGAAT TATCATCTCC TTCAACTAAT GAAGAGTTCT GTTGTAAATCA
CCCTTTCCTA TTCTTCATAA GGCAAAATAA GACCAACAGC ATCCTCTTCT
ATGGCAGATT CTCATCCCCA

13. (Previously Amended) A plasmid comprising the nucleotide sequence corresponding to one or more of exons 2 - 7 of SCCA1 gene fused to exon 8 of SCCA2 gene.

14. (Previously Amended) A plasmid comprising the nucleotide sequence corresponding to exons 2 - 7 of SCCA1 fused to the nucleotide sequence of exon 8 of SCCA2.

15. (Previously Amended) A plasmid comprising the nucleotide sequence corresponding to one or more of exons 2 - 7 of SCCA2 gene fused to exon 8 of SCCA1 gene.

16. (Previously Amended) A plasmid comprising the nucleotide sequence corresponding to exons 2 - 7 of SCCA2r gene fused to exon 8 of SCCA1 gene.

17. (Currently Amended) A plasmid according to claim 13, comprising the nucleotide sequence: of claim 12 ATGAATTCAC TCAGTGAAGC CAACACCAAG TTCATGTTTCG
ACCTGTTCCA ACAGTTCAGA AAATCAAAAG AGAACAACAT CTTCTATTCC
CCTATCAGCA TCACATCAGC ATTAGGGATG GTCCTCTTAG GAGCCAAAGA
CAACACTGCA CAACAGATTA AGAAGGTTCT TCACTTTGAT CAAGTCACAG
AGAACACCAC AGGAAAAGCT GCAACATATC ATGTTGATAG GTCAGGAAAT
GTTTCATCACC AGTTTCAAAA GCTTCTGACT GAATTCAACA AATCCACTGA
TGCATATGAG CTGAAGATCG CCAACAAGCT CTTCGGAGAA AAAACGTATC
TATTTTACA GGAATATTTA GATGCCATCA AGAAATTTTA CCAGACCAGT
GTGGAATCTG TTGATTTTGC AAATGCTCCA GAAGAAAGTC GAAAGAAGAT
TAACTCCTGG GTGGAAAGTC AAACGAATGA AAAAATTAAA AACCTAATTC
CTGAAGGTAA TATTGGCAGC AATACCACAT TGGTTCTTGT GAACGCAATC
TATTTCAAAG GGCAGTGGGA GAAGAAATTT AATAAAGAAG ATACTAAAGA

GGAAAAATTT TTT TGGCCAAACA AGAATACATA CAAGTCCATA CAGATGATGA
GGCAATACAC ATCTTTTCAT TTTGCCTCGC TGGAGGATGT ACAGGCCAAG
GTCCTGGAAA TACCATACAA AGGCAAAGAT CTAAGCATGA TTGTGTTGCT
GCCAAATGAA ATCGATGGTC TCCAGAAG CT TGAAGAGAAA CTCACTGCTG
AGAAATTGAT GGAATGGACA AGTTTGCAGA ATATGAGAGA GACATGTGTC
GATTTACACT TACCTCGGTT CAAAATGGAA GAGAGCTATG ACCTCAAGGA
CACGTTGAGA ACCATGGGAA TGGTGAATAT CTTCAATGGG GATGCAGACC
TCTCAGGCAT GACCTGGAGC CACGGTCTCT CAGTATCTAA AGTCCTACAC
AAGGCCTTTG TGGAGGTCAC TGAGGAGGGA GTGGAAGCTG CAGCTGCCAC
CGCTGTAGTA GTAGTCGAAT TATCATCTCC TTCAACTAAT GAAGAGTTCT
GTTGTAATCA CCCTTTCCTA TTCTTCATAA GGCAAATAA GACCAACAGC
ATCCTCTTCT ATGGCAGATT CTCATCCCCA (SEQ ID NO: 11), and deposited at
ECACC under deposition number ECACC 01031315.

18. (Previously Amended) A protein expression system for production of SCCA1/SCCA2 fusion protein.
19. (Previously Amended) A recombinant bacteria comprising a plasmid according to claim 13.
20. (Previously Amended) A recombinant bacteria comprising a plasmid according to claim 14.
21. (Previously Amended) A recombinant E. coli comprising a plasmid according to claim 13.
22. (Previously Amended) A recombinant E. coli comprising a plasmid according to claim 14.
23. (Previously Amended) A method for detecting the gene rearrangement forming the SCCA1/SCCA2 fusion protein using a cDNA cloning and sequencing analysis of tumor DNA.

24. (Previously Amended) A method for detecting the gene rearrangement forming the SCCA2/SCCA1 fusion protein using a cDNA cloning and sequencing analysis of tumor DNA.
25. (Previously Amended) A method for detecting the gene rearrangement forming the SCCA1/SCCA2 fusion protein using a Southern blot-technology applied on tumor DNA.
26. (Previously Amended) A method for detecting the gene rearrangement forming the SCCA2/SCCA1 fusion protein using a Southern blot-technology applied on tumor DNA.
27. (Previously Amended) A method for detecting the gene rearrangement forming the SCCA1/SCCA2 fusion protein using a PCR-analysis technology.
28. (Previously Amended) A method for detecting the gene rearrangement forming the SCCA2/SCCA1 fusion protein using a PCR-analysis technology.
29. (Previously Amended) A method for detecting the gene rearrangement forming the SCCA1/SCCA2 fusion protein using an amino acid sequencing technology.
30. (Previously Amended) A method for detecting the gene rearrangement forming the SCCA2/SCCA1 fusion protein using an amino acid sequencing technology.
31. (Previously Amended) A method for detection the SCCA1/A2 fusion protein using Western blotting.
32. (Previously Amended) A method for detection the SCCA2/A1 fusion protein using Western blotting.
33. (Previously Amended) A monoclonal antibody specific for SCCA1/SCCA2 fusion protein.
34. (Previously Amended) A monoclonal antibody specific for SCCA2/SCCAZ fusion protein.

35. (Previously Amended) A polyclonal antibody reactive with SCCA1/SCCA2 fusion protein.
36. (Previously Amended) A monoclonal antibody specific for SCCA2/SCCA1 fusion protein.
37. (Previously Amended) An immunoassay using a monoclonal antibody or polyclonal antibody specific for SCCA1/SCCA2 fusion protein for detecting the presence and concentration of SCCA1/SCCA2 fusion protein.
38. (Previously Amended) An immunoassay using a monoclonal antibody or polyclonal antibody specific for SCCA2/SCCA1 fusion protein for detecting the presence and concentration of SCCA2/SCCA1 fusion protein.
39. (Previously Amended) A method for diagnosing the presence or absence of a squamous cell carcinoma by detecting the SCCA1/SCCA2 fusion protein in a human sample.
40. (Previously Amended) A method for diagnosing the presence or absence of a squamous cell carcinoma by detecting the SCCA2/SCCA1 fusion protein in a human sample.
41. (Previously Amended) A method according to claim 39, wherein the fusion protein is used in a histochemical analysis.
42. (Previously Amended) A kit comprising a SCCA1/SCCA2 fusion protein antibody to be used in the determination of the presence or absence of squamous cell carcinoma (SCC).
43. (Previously Amended) A kit comprising a SCCA2/SCCA1 fusion protein antibody to be used in the determination of the presence or absence of squamous cell carcinoma

(SCC).

44. (Previously Amended) A kit according to claim 42, in that it further comprises antibodies related to SCCA1 and/or SCCA2.